

A Bill for an Act Relating to Education.

*Be It Enacted by the Legislature of the State of Hawaii:*

## PART I

SECTION 1. The legislature finds that the economic disruption caused by the global coronavirus disease 2019 pandemic has illustrated a need to diversify Hawaii's economy beyond tourism. The pandemic has also shown the importance of digital literacy, particularly as applied to distance learning, telehealth, and working from home.

The legislature further finds that the economic disruption caused by the pandemic has increased the focus on computer science education as a key driver of economic growth and digital literacy. A computer science pipeline can help to diversify Hawaii's economy beyond tourism to include cybersecurity, green energy, robotics, and other technology-based fields. Previously, the legislature passed Act 51, Session Laws of Hawaii 2018 (Act 51), which prioritized statewide computer science education by:

- (1) Requiring the department of education to develop and implement a statewide computer science curriculum plan for public school students in kindergarten through twelfth grade that may include design thinking as part of the curriculum; and
- (2) Beginning with the 2021-2022 school year, ensuring that each public high school offers at least one computer science course during each school year.

According to a June 2020 report from the University of Hawaii at Manoa, Act 51 was one of several initiatives that led to a rapid increase in computer science activities in education between 2017 and 2020. These activities have resulted in thirty-three public high schools and eleven combination schools now offering computer science courses. The number of students who took the Advanced Placement Computer Science Principles test and the Advanced Placement Computer Science A test increased 89.6 per cent and 28.7 per cent, from the 2017-2018 school year to the 2018-2019 school year, respectively. Further, the percentage of schools offering Advanced Placement Computer Science courses has increased from 6.8 per cent during the 2017-2018 school year to 22.7 per cent during the 2019-2020 school year.

The purpose of this Act is to improve digital literacy throughout the State by further increasing computer science education offerings at public schools.

## PART II

SECTION 2. Section 302A-101, Hawaii Revised Statutes, is amended by adding three new definitions to be appropriately inserted and to read as follows:

“Computer science” means the study of computers and algorithmic processes. “Computer science” includes principles, hardware and software designs, implementation, and impacts on society.

“Computer science content” means courses of instruction that provide:

- (1) Computer science instruction that is integrated with another subject; and
- (2) A final grade to each student.

“Computer science courses” means courses of instruction that provide:

- (1) Computer science instruction in stand-alone implementations; and

- (2) A final grade to each student.”

SECTION 3. Section 302A-323, Hawaii Revised Statutes, is amended to read as follows:

“~~§§302A-323~~ **Computer science; curricula plan; public schools.** (a)

The department shall:

- (1) Develop and implement a statewide computer science curricula plan for public school students in kindergarten through twelfth grade that may include design thinking as part of the curricula; and
- (2) Beginning with the 2021-2022 school year, ensure that each public high school offers at least one computer science course during each school year.
  - (b) Beginning with the 2022-2023 school year, at least one public elementary school and one public middle or intermediate school in each complex area shall offer computer science courses or computer science content.
  - (c) Beginning with the 2023-2024 school year, no less than fifty per cent of the public elementary schools and no less than fifty per cent of the public middle and intermediate schools in each complex area shall offer computer science courses or computer science content.
  - (d) Beginning with the 2024-2025 school year, all public elementary, middle, and intermediate schools shall offer computer science courses or computer science content.
  - (e) By June 30, 2022, and by each June 30 thereafter, the superintendent shall submit to the board and legislature a report of the computer science courses and computer science content offered during the previous school year at the schools in each complex area. The report shall include:
    - (1) The names and course codes of the computer science courses offered at each school;
    - (2) The number and percentage of students enrolled in each computer science course and computer science content, disaggregated by:
      - (A) Gender;
      - (B) Race and ethnicity;
      - (C) Special education status, including students eligible for special education under the federal Individuals with Disabilities Education Act, as amended, or section 504 of the federal Rehabilitation Act of 1973, as amended;
      - (D) English language learner status;
      - (E) Eligibility for the free and reduced price lunch program; and
      - (F) Grade level;provided that if a category contains one to five students, or contains an amount that would allow the amount of another category that contains one to five students to be determined, the number of students shall be replaced with a symbol indicating that one to five students fulfilled that particular category;
    - (3) The names and course codes of the courses containing computer science content and a description of the computer science standards and content that are covered by those courses; and
    - (4) The number of computer science instructors at each school, disaggregated by:
      - (A) Any applicable certification;
      - (B) Gender;
      - (C) Race and ethnicity; and
      - (D) Highest academic degree earned.

(f) For the purposes of this section, “offer” means to provide a computer science course or computer science content taught in the English or Hawaiian language by a teacher:

- (1) Who is physically located at the school; or
- (2) Who is not physically located at the school but provides instruction through virtual means with the assistance of a proctor who is physically located at the school.”

### PART III

SECTION 4. Chapter 302D, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:

**“§302D- Computer science.** (a) Beginning with the 2024-2025 school year, each public charter school that serves elementary, middle, intermediate, or high school students shall offer computer science courses or computer science content at a frequency that allows a student to enroll in a computer science course or receive computer science content at least once while the student is at each of the elementary school, middle or intermediate school, and high school levels.

(b) For the purpose of this section, “offer” shall have the same meaning as in section 302A-323.”

SECTION 5. Section 302D-1, Hawaii Revised Statutes, is amended by adding three new definitions to be appropriately inserted and to read as follows:

““Computer science” shall have the same meaning as in section 302A-101.  
“Computer science content” shall have the same meaning as in section 302A-101.

“Computer science courses” shall have the same meaning as in section 302A-101.”

### PART IV

SECTION 6. Statutory material to be repealed is bracketed and stricken. New statutory material is underscored.<sup>1</sup>

SECTION 7. This Act shall take effect on July 1, 2021.

(Approved July 1, 2021.)

#### Note

1. Edited pursuant to HRS §23G-16.5.